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09 2003 05:00PM

PATENT PA

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

CHIRINO, et al.

Serial No. 09/903,378

Filed: July 10, 2001

For:

Protein Design Automation for

Designing Protein Libraries with

Altered Immunogenicity

Examiner: Borin, Michael L.

CERTIFICATE OF FACSIMILE

TRANSMISSION

I hereby certify that this correspondence, included listed enclosures, is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703) 305-3014 on July 9, 2003.

Signature

Diane M. Tsuda

## RESPONSE TO OFFICE ACTION

Assistant Commissioner for Patents Washington, DC 20231

Sir:

This paper is being submitted in response to the Office Action mailed April 9, 2003. This response is being filed on or before July 9, 2003, making this a timely response. Although the Applicants do not believe any additional fees are required, the Commissioner is authorized to charge any additional fees, including extension fees or other relief, which may be required, or credit any overpayment to Deposit Account No. 502325 (69566-1).

Please amend the claims as follows.

## In the Claims:

- 1. (Amended) A method for modulating the immunogenicity of a target protein, said method comprising:
  - a) inputting a protein backbone structure with variable residue positions of a target protein into a computer;
  - b) computationally generating a set of primary variant amino acid sequences using at least one scoring function; and,
  - c) applying a computational immunogenicity filter against said set to identify at least one candidate variant protein,